

## **REMARKS**

### **I. Introduction**

Claims 1, 3, 6-9, 12-16, 18, 21-24, 27-31, and 33-37 were pending in the application when the Final Office Action was mailed March 4, 2009. Claims 1, 3, 6-9, 16, 18, 21-24, 31, and 33-37 were rejected. Applicants have not amended or canceled any claims but have added new claims 38-40. Accordingly, claims 1, 3, 6-9, 12-16, 18, 21-24, 27-31, and 33-40 are currently pending, with claims 12-15 and 27-30 being withdrawn. No new matter is added.

The Office Action rejected claims 1, 3, 6-9, 16, 18, 21-24, 31, and 33-37. More specifically, these claims were rejected under 35 U.S.C. § 103(a) over the combination of Iverson, Lee, "NODAL: A Filesystem for Ubiquitous Collaboration" ("NODAL") and Armstrong, Eric, "[unrev-II] Meeting Summary: 4 May 2000" (referred to as "Iverson" in the Office Action and herein). The applicants respectfully traverse this rejection.

### **II. The Applied References**

NODAL describes a "general, document-oriented distributed database and filesystem with a data model that allows addressing, searching and linking of content of any kind from any document. ... Moreover, it is built on a distributed client-server (or peer-to-peer) communication model that seamlessly shifts from synchronous, real-time interaction to asynchronous or intermittently-connected interaction." (NODAL, Abstract.)

Iverson summarizes a meeting in which Lee Iverson described a distributed document object model.

### **III. Applicants' Technology**

Applicants' technology is generally directed to enabling collaborative authoring of hierarchical documents in a distributed computing system. In some cases, a registration request is received from a business logic event handler for an event of a

distributed document object model system. The distributed document object model system causes the event to occur when a first modification is made to a hierarchical document. The business logic event handler is registered, and if the event occurs, is notified. An indication is received from the business logic event handler, and a business rule is applied that causes a second modification to the hierarchical document.

IV. Response to the Section 103(a) Rejections of Claims 1, 3, 6-9, 16, 18, 21-24, 31, and 33-37

Claims 1, 3, 6-9, 16, 18, 21-24, 31, and 33-37 were rejected under 35 U.S.C. § 103(a) over the combination of NODAL and Iverson. Applicants respectfully disagree with this rejection, for at least the reason that the applied references cannot support a Section 103(a) rejection of these claims, for at least the reasons set forth herein.

Claim 1 recites, *inter alia*, "monitoring for an occurrence of at least one of the first and second events," that "the first event occurs in response to a first modification made or requested to be made to the hierarchical document" and that "the second event occurs in response to a second modification made or requested to be made to the hierarchical document." Claim 1 further recites "detecting an occurrence of the first event" and "in response to the occurrence of the first event: notifying the first business logic event handler; receiving a first indication from the first business logic event handler; and performing a first function relating to the received first indication, wherein the performed first function applies a first business rule that causes a third modification to the first hierarchical document, wherein the third modification is different from the first and second modifications." Accordingly, the features of claim 1 enable monitoring for a event occurring in response to a modification made to a hierarchical document, detecting the event, and notifying a business logic event handler. An indication is received from the business logic event handler and a function related to the indication is performed that applies a business rule that results in another, different, modification to the hierarchical document.

NODAL does not teach or suggest monitoring for a modification to a hierarchical document, detecting the modification, notifying a business logic event handler, and applying a business rule that results in performing another, different, modification to the hierarchical document. The Office Action states that NODAL's Cursor corresponds to a business logic event handler. The applicants respectfully disagree. NODAL's Cursor does not perform a modification to a hierarchical document in response to a preceding modification. Rather, NODAL's Cursor is an interface that enables a program to access data mutation interfaces for purposes of mutating nodes. (NODAL, p. 20.) NODAL describes that the Cursor maintains an audit trail or pedigree. A pedigree is data that describes the complete history of a document. (Id.) Therefore, a pedigree is metadata (i.e., data about the document, and not the actual document itself – the document content). Even if NODAL is read as modifying the pedigree in response to data mutations (an assumption which the applicants do not necessarily agree with), modifying the pedigree still does not constitute modifying a document in response to a previous modification made to the document. This is because modifying metadata about a document is not the same as modifying the document itself. Therefore, NODAL does not teach or suggest monitoring for a modification to a hierarchical document, detecting the modification, notifying a business logic event handler, and applying a business rule that results in performing another, different, modification to the hierarchical document. For at least this reason, NODAL does not teach or suggest all the features of claim 1.

The applied references cannot support a Section 103 rejection of claim 1 for at least one additional reason. Claim 1 recites, *inter alia*, that the first business logic event handler "is registered for a hierarchical document of the distributed document object model system" and "is responsive to an occurrence of the first event of the distributed document object model system." Claim 1 further recites that the second business logic event handler "is registered for the hierarchical document of the distributed document object model system, wherein the second business logic event handler is different from the first business logic event handler" and "is responsive to an occurrence of the second

event of the distributed document object model system." Moreover, claim 1 recites that "the second event is different from the first event." Accordingly, the first and second business logic event handlers are different from each other, and both are registered for different events of the same hierarchical document of the distributed document object model system.

NODAL does not teach or suggest multiple business logic event handlers registered for the same hierarchical document and that each respond to different events. As noted above, NODAL describes that the Cursor is used for accessing data mutation interfaces. One of ordinary skill in the art would understand this to mean that there is a one-to-one relationship between a Cursor and a document. In other words, a single Cursor would be used to access data mutation interfaces for a single document. However, a single Cursor for a document does not constitute multiple business logic event handlers that are each registered for the same hierarchical document. Even if NODAL is read to describe multiple Cursors per document (an assumption which the applicants do not necessarily agree with), NODAL contains no suggestion that the multiple Cursors would each be registered for different events. Therefore, NODAL does not teach or suggest multiple business logic event handlers registered for the same hierarchical document and that each respond to different events. For at least this additional reason, NODAL does not teach or suggest all the features of claim 1.

The Office Action does not suggest that Iverson cures NODAL's deficiencies. Because NODAL and Iverson, alone or in combination, cannot support a Section 103(a) rejection of claim 1, claim 1 is allowable. The remaining independent claims recite similar features, and are thus allowable for similar reasons. For at least these reasons, applicants respectfully request that the rejections of claims 1, 3, 6-9, 16, 18, 21-24, 31, and 33-37 under 35 U.S.C. § 103(a) be withdrawn.

V. New Claims 38-40

New claims 38-40 have been added. The subject matter of these claims is supported by the figures and text of the application as originally filed. (See, e.g., paragraphs [0073] and [00123], describing criteria applied to events, determining if the criteria are satisfied by the events, and if so, applying business rules, as well as Figures 16-18, illustrating multiple event handlers and responding to mutations.) Therefore, these claims do not add any new matter to the application and are fully supported under 35 U.S.C. § 112, first paragraph. New claims 38-40 recite additional features that are not taught or suggested by the applied references. For example, new claim 38 recites that "the first business logic event handler includes one or more criteria that are applied to events of the distributed document object model system and one or more business rules." Even if NODAL's Cursor is read as corresponding to a business logic event handler (an assumption which the applicants do not necessarily agree with), the Cursor still does not include one or more criteria and one or more business rules. As another example, new claim 39 recites that "the first event is handled exclusively by the first business logic event handler and the second event is handled exclusively by the second business logic event handler." Even if NODAL is read to describe multiple Cursors per document (an assumption which the applicants do not necessarily agree with), an event would not be handled exclusively by a single Cursor; rather, one of ordinary skill in the art would understand that any event may be responded to by any Cursor. As another example, new claim 40 recites that "the first business logic event handler performs the first function that applies the first business rule that causes the third modification to the first hierarchical document." As noted herein, NODAL's Cursor does not apply business rules that cause modifications. For at least these reasons, new claims 38-40 are patentable over the applied references.

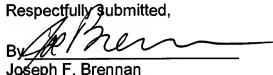
VI. Conclusion

The claims each recite a novel combination of elements that is neither taught nor suggested by the applied references and so cannot be properly rejected under 35 U.S.C. §§ 102 or 103. Based on these amendments and remarks, applicants respectfully request allowance of this application. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-6065.

Please charge any deficiencies or credit any overpayments to our Deposit Account No. 50-0665, under Order No. 612188007US from which the undersigned is authorized to draw.

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Respectfully Submitted,

By:   
Joseph F. Brennan  
Registration No.: 62,403  
PERKINS COIE LLP  
P.O. Box 1247  
Seattle, Washington 98111-1247  
(206) 359-8000  
(206) 359-7198 (Fax)  
Attorney for Applicant